



CITY OF CAPE TOWN
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The Cape Town Bioregional Plan: **Process and Consultation Report**

Submitted as a requirement for the publication of
The Cape Town Bioregional Plan

April 2012 (Updated September 2014)

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Contents

1. Introduction	4
2. Process Outlined	5
<input type="checkbox"/> Request to Declare a Bioregion and Publish a Bioregional Plan	5
3. The Steering Committee & Commenting	7
15. Conflict Resolution Process	11
<input type="checkbox"/> Addressing areas of potential impact between biodiversity, other natural environment priority areas and spatial planning proposals	11
<input type="checkbox"/> Procedure for dealing with areas of potential impact within the City of Cape Town	12
<input type="checkbox"/> Identified Areas of Potential Impact	13
<input type="checkbox"/> The Role of Environmental Impact Assessments in assisting the decision making process with regard to areas of potential impact	24
<input type="checkbox"/> Principles for assessing development proposals in "areas of potential impact" on selected natural environmental attributes (flora, fauna, wetlands, rivers, coast etc.)	24
Appendices	26

List of Tables

Table 1: The process principle of drafting a plan	5
Table 2: CoCT BP Steering Committee	7
Table 3: The identified (August 2009 and updated August 2014) areas of potential impact	13

1. Introduction

As part of the Bioregional Plan development a Process and Consultation Report (PCR) is required that describes the process adopted and followed in developing the Bioregional Plan for a Bioregion. The PCR also deals explicitly with areas of potential impact and how they are dealt with in the bioregional planning process. A conflict resolution process is outlined in the report.

The City of Cape Town (CoCT) has put into place a hierarchy of plans within which planning takes place in the City. In this regard the Cape Town Spatial Development Framework (CTSDF) is accepted as the lead plan that incorporates other sectoral plans, including the Biodiversity Network (BioNet) into an overarching spatial plan to implement the future vision for the CoCT.

The CoCT has adopted this approach to streamline the management of biodiversity and its components in the bioregion in a way that will minimise conflict with the bioregions approved plans, including the CTSDF and the Integrated Development Plan.

This hierarchical approach requires that the lead plan be approved prior to the sectoral plans. In adopting this approach the City aims to reduce potential conflicts occurring between the CTSDF and the subordinate sectoral plans. This is also necessary to ensure that subordinate sectoral plans do not unnecessarily move the delegated powers of development approval to a higher sphere of government.

The CoCT therefore adopted a process to integrate the BioNet (the Critical Biodiversity Area maps are the basis for the Bioregional Plan) directly into the CTSDF. In adopting this approach the CoCT has pre-aligned the plans, prevented potential public confusion between the roles of the various plans and ensured that there is alignment between the Provincial Spatial Development Framework (and the provincial spatial planning categories), the CTSDF and the CoCT Bioregional Plan (CoCT BP).

The detailed Critical Biodiversity Area (CBA) maps and associated land use guidelines have been integrated into the District Spatial Development plan (SDP)/Environmental Management Framework (EMF) documents which have been approved by Council in terms of Sec 4(10) of the Land Use Planning ordinance (LUPO) 1985.

It was agreed internally among City Departments that once the CTSDF had been approved by Council and the DEA&DP, PG:WC in terms of S4(6) of Land Use Planning Ordinance 1985, the CoCT BP would be presented to Department Environmental Affairs & Development Planning (DEAD&DP) for approval and publication and the declaration of the CoCT Bioregion.

The CoCT's Environmental Resource Management Department (ERMD) received the mandate to pursue the publishing of a Bioregional Plan for the City in the Council resolutions dated 07 December 2006 (C39/12/06) and 27 May 2009, (C64/05/09) (Appendix 1).

2. Process Outlined

□ Request to Declare a Bioregion and Publish a Bioregional Plan

In accordance with the National Environmental Management: Biodiversity Act (NEMBA: Act 10 of 2004, regulation 40(1)) and the Guideline regarding the determination of Bioregions and the Preparation and Publication of Bioregional Plans (hereafter referred to as the Guideline), the City of Cape Town (CoCT), in consultation with South African National Botanical Institute (SANBI), submitted a request to the Minister of Environmental Affairs via the Head of the DEA & DP for the Western Cape Provincial Government, to proceed with drafting the CoCT BP and on completion declare the CoCT Bioregion and publish the CoCT BP (Appendix 2).

In a letter dated 23 September 2010 (Appendix 3), the Minister granted his approval, subject to the conditions outlined in his letter. The conditions included the establishment of a project steering committee to oversee the drafting of the BP, with reference to specific steering committee members and the process steps to be followed.

Table 1: The process principle of drafting a plan

To ensure that the affected public and the approving authority are taken along in the process and to avoid the situation where the public is confronted with a fait accompli at a late stage

PHASES ↓	STEPS PER PHASE →	Drafting of product for evaluation	Steering Committee review	Review by affected public	Signing off of product
	Status quo, goals, problems & issues	Draft report compiled by drafting team	Endorsed or referred back to team	Made known to stakeholders (60 days)	By delegate of approving authority
	Spatial perspective, objectives & principles	Draft report compiled by team	Endorsed or referred back to team	Made known to public (60 days)	By delegate of approving authority
	First draft plan (& more drafts if needed)	Draft plan incl. report (iterations as needed)	Endorsed or referred back to team	Made known to public (60-90 days)	By delegate of approving authority
	Final draft plan	Final plan including report	Endorsed or referred back to team	Made known to public (90 days)	Approving authority

The CoCT accepted the conditions and the process plan (see table 1), but due to the long term standing of biodiversity planning in the city and the integrated spatial development planning process that had been followed to date, felt that the City had in fact completed phases 1 & 2 of the process plan.

In a letter dated 15/11/2010(Appendix 4), the City made representation to DEA&DP to agree to an amended process based on the premise the Phase 1 & 2 had been adequately addressed through the fine-scale, systematic conservation plan for the City (known as the BioNet) being a long standing, adopted sectoral plan that will be used as the basis for the CoCT BP. Conservation planning work for the BioNet was initiated in 2001 and was informed by key stakeholder participation¹.

The BioNet has since been updated several times in 2006, 2008, 2009 and most recently in 2011 and incorporates the latest national vegetation type mapping, national ecosystem targets and updated and ground-truthed biodiversity remnants and detailed wetlands mapping. It also forms part of the Western Cape Biodiversity Framework. The BioNet has been integrated as a base layer, and is the primary biodiversity informant, in the CTSDF and eight district SDP's and EMF's. These spatial plans have been through two extensive public participation processes.

It was agreed between the ERMD and the Spatial Planning and Urban Design department (SPUD) that the relevant Bioregional Plan elements would be integrated into the CTSDF in order to facilitate alignment of the plans and ensure a clear hierarchy of planning documents in the City. The elements of the BP that are not covered in the CTSDF will be dealt with in the CoCT BP.

The City also proposed an initial meeting with the suggested steering committee, where the latest BioNet could be presented, along with the intention of publishing a Bioregional Plan. It was also suggested that the steering committee should agree to the City's amended process plan.

A meeting was convened on the 9 February 2011 to discuss the proposed process for publishing a CoCT BP (see Appendix 5) for a list of attendees and minutes from the meeting).

At the meeting the City proposed that Phases 1 & 2 in the process principle table outlined by the Minister had already been completed by:

Phase 1: “Status quo, goals, problems & issues”: The status quo is the current status of biodiversity in the city and is reflected in the BioNet which identifies the Critical Biodiversity Areas and Ecological Support Areas for terrestrial and aquatic ecosystems and species across the metropole. The BioNet is aligned to the national biodiversity targets and priorities, and is thus representative of regional and national biodiversity goals. The BioNet is the name of the Critical Biodiversity Area map for the metropole that forms the basis for the Bioregional Plan. It has been incorporated into the City's spatial plans, namely the CTSDF,

¹ City of Cape Town BioNet Prioritization Project Final report (June 2004); <http://www.capetown.gov.za/environment> (Go to: publications; reports & scientific papers).

SDPs/ EMFs. Thus problems and issues with the BioNet have been raised through the public participation process for the SDF. These are listed in the comments and response document (see Appendix 3).

Phase 2: “Spatial perspective, objectives and principles”: The spatial perspective of the BioNet is presented in its entirety in the CTSDF as a key base layer. The notion of Critical Biodiversity Areas has already been pulled through into the SDF and the categories have been aligned to those of the Provincial SDF. The intention to prepare a Bioregional Plan is listed as a specific action in Policy Statement no. 25 of the CTSDF. Two rounds of public participation have been completed for the SDF.

The February 9 meeting resolved that City submit evidence to DEA&DP on the Phase 1&2 public participation processes in order for the Department to decide whether sufficient engagement had occurred to justify moving on to Phase 3 (*First draft plan*).

In addition to the comments and response document, a list of other public engagements was submitted to DEA&DP which indicated the breadth of communication relating to the Critical Biodiversity Area map (i.e. BioNet) and its implementation between 2008 and 2011. (See Appendix 6).

It was requested that the Department consider the above sufficient for completion of Phases 1&2 public participation, and that the CoCT complete one last step under Phase 2, which was to engage with the proposed project steering committee representatives.

This information was communicated to DEA&DP in a follow up letter dated 09/05/2011 and was copied to stakeholders (Appendix 7).

In a letter dated 6 June 2011 (Appendix 8), received from DEA&DP the above proposals were accepted by the department and permission granted to proceed to Phase 3 of the process plan.

3. The Steering Committee & Commenting

The first steering committee meeting was held on the 31 August 2011 (see Appendix 9) for meeting minutes), and Table 2 lists the organisations that were represented at the first steering committee meeting.

Table 2: CoCT BP Steering Committee

1. COCT: Biodiversity Management; ERMD
2. COCT: Environmental Compliance; ERMD
3. COCT: Manager Biodiversity Management; ERMD
4. Dept. Water Affairs: Resource protection
5. SANBI
6. DEA & DP

7. Airports Company South Africa
8. PGWC: Transport & Public Works
9. CapeNature Conservation
10. COCT: Transport
11. Dept. of Agriculture

INVITED (not in attendance)

12. Dept. Mineral Resources
13. Eskom (Comments subsequently received independently)
14. Cape West Coast Biosphere Reserve

A draft of the Bioregional Plan was sent out to the steering committee members for comment. In addition to this a Steering committee meeting was held on 7 March 2012 (Appendix 10), a week before the due date for comments, to discuss the bioregional plan and answer any questions etc.

Comments were received and incorporated into the final draft document for submission. Organisations that did not submit comments were contacted several times to request comments (even after the closing date).

All comments and responses have been recorded (Appendix 11). Comments were received from:

1. Department of Environmental Affairs & Development Planning.
2. South African National Parks: Table Mountain National Parks.
3. CapeNature Conservation.
4. CoCT: Planning and Building Development Department.
5. CoCT: Transport Planning Department.
6. ESKOM

In a letter dated 12/12/2012 (Appendix 13), the City of Cape Town requested further clarity from DEA&DP, regarding the implications on a declared bioregion and the publishing of the Cape Town Bioregional Plan. The primary concern being the required alignment of the Cape Town Spatial Development Framework (CTSDF) with a published bioregional plan and the impact this would have on the land use decision making processes within the City. Clarity was requested around the legal subservience of the CTSDF to the published bioregional plan and mechanisms required around amendments to the CTSDF and the required alignment with the BP and how this NEM: BA provision would be applied in practice.

In a letter dated 13/03/2013 (E18/2/1/BC5) (Appendix 14), DEA&DP provided a response that referred back to the **“Guideline regarding the Determination of Bioregions and the Preparation and Publication of Bioregional Plans”**, but pointed out the following important points/interpretations:

- The guideline clarifies that a bioregional plan is not itself a multi-sector plan (like the CTSDf) which inputs from many sectors, but “rather the biodiversity sectors inputs into various multi-sectoral planning and authorisation processes”.
- From the wording in NEM: BA a published bioregional plan must also be taken into account, amongst other relevant considerations, when considering the merits of an application. The bioregional plan does, however, not (pre)decide a development application.
- It is not necessary to first amend a bioregional plan before deciding to approve an application that is not in line with the bioregional plan.
- An integrated bioregional plan and SDF drafting process should be followed.
- Because a bioregional plan and SDF does not have to be amended before deciding to approve an application that is not in line with the bioregional plan and SDF, it also allows for the bioregional plan and SDF to not be amended on an *ad hoc* basis, but rather annually or as the need arises as part of the IDP performance review and amendment process.

DEA&DP also requested the inputs from SANBI and CapeNature on this matter.

In a letter dated 11/06/2013 (Appendix 15), CapeNature confirmed its agreement with DEA&DP's interpretation, but also requested SANBI, as the national authority on administering the Bioregional Plans, provide their interpretation.

In a letter dated 09/10/2013 (BP/WC/01/ver01/comment/01) (Appendix 16), SANBI responded as follows:

1. *Whether the CTSDf is legally subservient to an approved Bioregional Plan.*

SANBI concurred with the view of DEA&DP, but stresses the importance of alignment between the bioregional plan and the CTSDf.

2. *Whether revision of the CTSDf would first require a revision of the Bioregional Plan and specifically how a CTSDf revision would impact on an approved Bioregional Plan.*

SANBI concurred with the view of DEA&DP. Revisions should be linked to the annual IDP review and amendment process if required. The revision of the bioregional plan and CTSDf should be integrated to facilitate alignment.

There are justified reasons for occasional land-use decisions that are inconsistent with the SDF (& therefore the Bioregional Plan). We therefore view the differentiation between revision and amendments as pertinent to the third question:

3. *Whether land-use decisions that deviate from the CTSDf, including deviations that require amendments to the CTSDf, must be aligned with the Bioregional Plan.*

We concur with DEA&DP's assessment and we do not deem it necessary to amend the Bioregional Plan prior to approving a development that deviates from the SDF.

SANBI confirmed their support for the publishing of the Cape Town Bioregional Plan and are confident that it supports the aims and objectives of the CTSDf. The alignment provision supports consistency and accountability in spatial planning as well as decision-making on individual applications and would not place an onerous incremental decision-making requirement on sustainable development.

A report was submitted to the Cape Town City Council on the 20 August 2014 to request approval for a request to be submitted to the MEC of Environmental Affairs to declare the City of Cape Town a Bioregion and to publish the Cape Town Bioregional Plan in accordance with the National Environmental Management: Biodiversity Act 10 of 2004, as a specific action detailed in Policy 25 (page 62) of the approved Cape Town Spatial Development Framework.

In the minutes (Appendix 17) Council resolved that:

- (a) the City request the MEC for Environmental Affairs to declare the city as a bioregion and to publish the Cape Town Bioregional Plan, as prepared, in accordance with the National Environmental Management: Biodiversity Act (Act 10 of 2004).
- (b) the City of Cape Town's Bioregion Plan be used as a guiding plan to facilitate, and not to hinder, development in the City.

In accordance with the Guideline, SANBI issued their letter of support to the MEC on 3 October 2014 (Appendix 18) for the declaration of the Cape Town Bioregion and the publication of the Cape Town Bioregional Plan and issued the unique reference number **BP/WC/CoCT/v1**.

15. Conflict Resolution Process

Addressing areas of potential impact between biodiversity, other natural environment priority areas and spatial planning proposals

The ERMD staff engaged with colleagues in the Spatial Planning and Urban Design department in the early stages of developing the SDP's and EMF's, to present the biodiversity priorities and to discuss areas of potential impact with existing development applications and proposed New Development Areas (NDAs). The ERMD participated both in the SDP and EMF public workshops, as well as meeting with individual spatial planners responsible for each district plan.

There were several outcomes from these interactions concerning critical biodiversity areas and conflicting development areas: It was agreed that:

1. Where there was a positive Environmental Authorisation, the affected vegetation remnants or wetlands were **removed** from the City natural remnant layer and the BioNet (BioNet).
2. Where there has been an outdated environmental assessment, especially if new biodiversity information has come to light, we have called for an updated assessment.
3. Sites with mining permits and priority biodiversity: Call for an updated assessment in cases where biodiversity was not adequately addressed in the environmental assessment.
4. NDAs and other proposed developments on natural vegetation remnants: we recommend that these will have to go through the EIA process if they cannot be moved to other sites.

One of the purposes of drafting an integrated EMF/DSDP was to maximise the extent to which spatial strategies and land uses (as mapped and described in the DSDP) are in harmony with the environmental characteristics and resources of the area concerned.

The integrated DSDP/EMF's currently (January 2012) consist of three documents for each of the eight districts:

Volume 1: The baseline environmental information and analysis report, which describes the environmental attributes of an area and guides the development of the Environmental Impact Management Zone tables and maps which identify those kinds of activities (or developments) likely to be acceptable (with appropriate mitigation and management) in specific types of environment. The Environmental Impact Management zone tables are contained in Volume 2.

Volume 2: Strategies, proposals and implementation framework: this is the medium term plan that will guide spatial development in the district. The plan includes an Environmental Management Framework as an informant.

Volume 3: Public comment and responses report: this documents the public and authorities' comments on the plan during the course of the public involvement process and the responses to them.

The primary informant in the EMF is the BioNet (incorporating national and local ecosystem and species targets). Significant effort has been made to ensure that spatial and land use proposals do not conflict with key natural resources – and in particular, the Critical Biodiversity Areas (CBAs). However, the richness, irreplaceability² and extent of the BioNet in Cape Town has posed challenges for the spatial planners and in some cases it has not been possible to totally resolve conflicts between key biodiversity areas and areas identified as being desirable for development. These areas are indicated on the composite DSDP/EMF map with a specific symbol. Some principles and procedures to deal with these areas are described below.

Procedure for dealing with areas of potential impact within the City of Cape Town

The EMF/DSDP compilation process resulted in the identification of most of the areas of potential impact (see Table 3) but it is possible that more will come to light in future as further information becomes available and development pressures intensify. When a possible area of potential impact is identified the following steps should be taken:

Step 1: Contact the ERMD District Environment & Heritage Management and Biodiversity Management branches and any other departments likely to be affected by or have a key interest in the project, e.g. the Roads and Stormwater Department.

Step 2: Together determine a fair and transparent process for addressing the impact area. This may include:

- Determining information requirements to enable decision making and how this information needs to be obtained and timed in relation to proposed project milestones. Determine if a statutory (National Environmental Management Act) environmental assessment and/or specific environmental studies are required in order to inform decision

² This is a measure of the uniqueness of the biodiversity; many ecosystems and species may only be conserved at specific sites or only within the City.

making and how these may affect the nature and timing of the proposed project;

- Identification of key parties who may have an interest in or need to make input to the process. This may include authorities or organisations from outside the City;
- Investigation of feasible alternatives;
- If use of the site is unavoidable, exploring mitigation options;
- Setting up the necessary meetings to explore different options to address the problem.

Step 3: Record the proposed process and ensure that there is general agreement thereon.

Identified Areas of Potential Impact

Table 3: The identified (August 2009 and updated August 2014) areas of potential impact

(EA = Environmental Authorisation)

District A

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
NDA east of Maitland on Wingfield site; Erf 168241 & others, Cape Town	No	Utility	High/med condition irreplaceable remnants; consolidation areas, CBA1, 2	CBA1 & 2; wetlands. The biodiversity areas slightly to the north and in District D are more significant and form a corridor with these biodiversity areas east and north of Maitland. As the vegetation is Critically Endangered, but mainly of low habitat condition, development would probably require a biodiversity offset and strategic placement of open spaces (to include natural vegetation patches and/ or wetlands).
Lions Hill: Erf 1526 Tamboerskloof	Nov 2011 for part of property; appeal submitted & under review	General Residential	Medium condition irreplaceable remnants; CBA1	Critically Endangered vegetation adjacent to Table Mountain National Park; required for national vegetation targets. Development not supported from a biodiversity perspective, but if approved would require mitigation in the form of a suitable biodiversity offset.

District B

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Milnerton Racecourse	2000	Residential/ Public Open Space	High condition conservation site; Protected: In perpetuity	EIA process identified some of the biodiversity impacts. Retain on BioNet - Future development of Remainder still to commence, but connectivity of existing two secured Conservation areas to be negotiated
CA 224-0-1, Milnerton Estates	2000	Non-defined		EIA process identified some of the biodiversity remnants, but a further botanical assessment has been requested. Secure good remnants & consolidation areas; biodiversity offset for other

				restorable low condition areas. Retain on BioNet to ensure appropriate corridors/buffers/offsets
CA 431-1 & 2, Garden Cities	2000	General Residential 2	Conservation site; Protected: In Perpetuity, CBA 1,2	Secure good remnants & consolidation areas; biodiversity offset for other restorable low condition areas. Retain on BioNet to ensure appropriate corridors/buffers/offsets
CA 431-2, Garden Cities (NDA)	No	Non-defined	High/med condition irreplaceable remnants, CBA1, Conservation site; Protected: In Perpetuity,	Essential towards national targets for CR vegetation type (Cape Flats Sand Fynbos))
CA 152-3, CA 152-2, Kohler Bricks (NDA)	No	Agriculture	High/med condition irreplaceable remnants, CBA1	Essential towards national targets for CR vegetation type (Cape Flats Sand Fynbos)
CA 153 Vissershok landfill	October 2007	Agriculture	High/med condition irreplaceable remnants, CBA1, CBA 2	Essential for meeting national targets for CR vegetation type (Cape Flats Sand Fynbos). Silcrete outcrop was translocated to edge of development and restored according to approved vegetation rehabilitation plan
Atlantis 81-5969, (NDA) Kanonkop Housing Phase 1	January 2014	Non-defined	other natural vegetation	Search & rescue required prior to construction commencement
Atlantis 81-6267 & 8 (NDA) Kanonkop Housing Phase 2&3	January 2014	Non-defined & residential respectively	other natural vegetation	Search & rescue required prior to construction commencement
Atlantis 81-2741 & 81-2756 (NDA)	No	Non-defined & Rural respectively	other natural vegetation	EIA should identify suitable biodiversity offset in mitigation of development; consolidate conservation into larger, manageable sites. Loss of wetlands should be avoided unless future persistence is unlikely.
Mamre MA971-0 (NDA)	No	Agriculture	Mainly transformed; CBA1 high/medium vegetation remnants, small portion CBA2; OESA	EIA should identify transformed areas for development & avoid CBA vegetation and wetlands.
Mamre MA976 Wind farm	July 2013, conditions appealed & over-ruled by DEA	Agriculture	CBA1 high/medium vegetation	Limited mitigation: aliens to be cleared. Maintaining ecological fire regime under the wind turbines and electrical infrastructure will be difficult
CA 141-0-2, sand mine		Agriculture	High/med condition irreplaceable remnants; restorable irreplaceable sites CBA 2	No go; biodiversity offset for any portion of restorable area mined; restore indigenous vegetation cover post-mining. Retain on BioNet - No record on EHRM system on this mining application. No DME permit issued that we are aware of.
CA 101-2,	N/A	Agriculture	High/med	Application withdrawn

sand mine			condition irreplaceable remnants; restorable irreplaceable sites (CBA1, 2)	
CA 34-0; Koeberg training facility	October 2010	Agriculture	Conservation areas	Eskom to draw up a Koeberg NR management plan to CapeNature's satisfaction
CA 32-1 City Land-fill – moved to district C	N/A	Agriculture	High/med condition irreplaceable remnants; consolidation sites (CBA1,), small portion other natural vegetation	Moved to Klipheuwel in district C
CA 1491-0-1, prospecting application		Agriculture	High/med irreplaceable remnants; consolidation sites (CBA 1), small portion other natural vegetation, no longer a conflict	No go; biodiversity offset for any portion of restorable area mined; restore indigenous vegetation cover post-mining. DME Granted Prospecting right only. Retain on BioNet to ensure appropriate corridors/buffers/offsets
CA 41-1-1	EIA in process	Agriculture	High/med irreplaceable remnants; consolidation sites (CBA 1)	EIA mooted. The opinion is held that this application will be a No-Go. Retain on BioNet to ensure appropriate corridors/buffers/offsets
CA 32-13 Apollo Bricks	EIA in process	Agriculture	Consolidation sites (CBA 1), CBA 2, no longer a conflict	Minimum fynbos corridor width (300m) secured within consolidation area; biodiversity offsets for areas developed. Retain on BioNet to ensure appropriate corridors/buffers/offsets
CA 1373-0	Yes/ 2004	Agriculture	High/med irreplaceable remnants (CBA 1), OESA, no longer a conflict	Biodiversity issues addressed in EIA. Rondeberg Equestrian development which only affects a small portion of the farm. Retain on BioNet to preserve the remainder of the farm.
CA 1183; Atlantis Industrial; various	Some EIAs in process	Industrial	Unselected natural vegetation	Development inside the urban edge supported conditional on biodiversity offsetting .
MA 977-1 & MA 976-1	N/A- prospecting application	Agriculture	Irreplaceable core flora sites; high/med irreplaceable remnants; consolidation sites (CBA 1), small portion CESA, other natural vegetation, no longer a conflict	Prospecting not supported. No go; biodiversity offset for any portion of restorable area mined; restore indigenous vegetation cover post-mining. The opinion is held that this will be a No-Go. Retain on BioNet.
Atlantis Rem. Farm No. 6 Papekuil Outspan	1970s EA for cemetery confirmed	Agriculture	Irreplaceable Core Flora Site; high condition fynbos remnant	Most of the high quality Core Flora Site will be lost to cemetery development. Search & rescue of bulbs, rescue of high quality topsoil with seed banks to be moved from development footprint

			and wetlands forming connecting portion of Dassenberg Coastal Catchment Corridor(DCCP)	to restore degraded portions of the DCCP
Erf 2003 Melkbos Mixed use urban development outside urban edge	No, draft scoping report in process	Agriculture	CBA1 high condition strandveld vegetation and CBA wetlands	Development not supported from a biodiversity perspective
Portions of Farm CA152/2/3 City Biosolids plant	No	Agriculture	CBA2; low condition irreplaceable fynbos remnant	Although vegetation is in low condition it is considered restorable. If development proceeds, a biodiversity offset may be required

NOTE: Erf 1063-18 has been removed from the biodiversity remnant layer owing to mining proceeding across the site during 2007-8.

District C

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Farm 732, portions 2, 19, 20	No, in process for ptn 19	Agriculture	Med & low condition, irreplaceable (CBA1)	Assess long-term viability; biodiversity offset as minimum requirement
Farm 725, portion 41 proposed residential development	No	Agriculture	Low condition, irreplaceable (CBA 2)	Assess long-term viability; biodiversity offset as minimum requirement
Farm 728/39,40 & 249 Industrial development	Nov 2011	Non-defined	CBA2 remnant of critically endangered vegetation , wetlands	Search & rescue of threatened bulb species by CCT-Biodiversity Management; financial biodiversity offset towards management of another critically endangered Cape Flats Sand Fynbos site
Farm 728/7,8,9,325,326 326 Industrial development	No; EIA in process	Non-defined	CBA2 remnant of critically endangered vegetation , wetlands	Assess long-term viability; biodiversity offset as minimum requirement
Erven 4258 (2402), 3423, Brackenfell (Northpine)	July 2010	General Business, Utilities, Agriculture	Critically endangered vegetation in low condition	None
Fisantekraal East (Garden Cities) Farms 724, portions 2,3,4,7,8,19	Nov 2012	rural	High, Med, Low & transformed condition, irreplaceable; wetlands (CBA 1, 2)	Adequate corridors will be set aside as mitigation where semi-natural conditions can prevail, faunal biota can move and associated ecological processes can occur. The south-eastern wetland area has the most ecological value and was regarded as the most important area to conserve. The more sensitive, higher value wetlands such as hill slope seeps, depression wetlands will be consolidated into a larger open space area with a greater chance of rehabilitation

				and the ability to perform a range of ecological functions.
Erf 4525, North Pine	No	Provincial Land zoned for school	Critically Endangered vegetation in low condition	Alternative remnant required to establish a <i>Serruria furcellata</i> population as remaining natural area too small to conserve viable plant populations
Erf 1165-0-2	No; EIA in progress	Agriculture	CBA1, CESA wetlands	Assess long-term viability; biodiversity offset as minimum requirement or set aside sensitive areas for conservation
Farm 480-0	No; EIA in progress	Agriculture	CBA1, OESA	Assess long-term viability; biodiversity offset as minimum requirement or set aside sensitive areas for conservation
Erf 214-1-1 Perdekop	No; EIA in progress	Agriculture	CBA1, wetland	Sensitive biodiversity areas should be set aside for conservation
214-12 Urban infill	No	Agriculture	CBA1, wetland	Sensitive biodiversity areas should be set aside for conservation
Erf 732-326, 8; new urban infill	No; EIA in progress	Non-defined & Transport 2	CBA2, CESA	Assess long-term viability; biodiversity offset as minimum requirement
Erf 241-30 Kuilsriver residential development	No; EIA in progress	General Residential	CBA1	Assess long-term viability; biodiversity offset as minimum requirement or set aside sensitive areas for conservation

NOTE: Erf 652 Scottsdale, Farms 728, ptns 39, 40, 249 and Farm 732 ptns 7 and 8 recently were removed from the vegetation remnant layer in District C as they have received positive development EAs with no appeals. Farm 732 portion 9 remains on the BioNet for now, but has been removed from the conflicts layer.

District D

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Industrial development on SE portion of airport area; erf 173309	Feb 2008	Non-defined	CBA1, medium condition, Endangered vegetation, other natural vegetation, wetlands	some higher quality vegetation and wetland set aside for conservation
Industrial development on NE portion of airport area; erf 113303	No	Non-defined	Medium condition, Endangered vegetation, CBA1	Any new development should unlock resources for management of adjacent biodiversity sites.
Jack Muller Park development; erf 4399	No	Non-defined; usage public park	Low condition, irreplaceable vegetation, CBA2, Conservation area, SE portion transformed	Should be subject to a botanical assessment during winter. Threatened species may be present among the silcrete outcrops. If negative impact assessed as low, the recommendation would be to conduct a search and rescue for bulbs of indigenous plants, to secure a suitable buffer along the watercourse with a biodiversity offset for any remnant area lost to development.

Development south of Richwood; erf 6273 & City land	No	Non-defined	Medium and low condition, irreplaceable vegetation, CBA 2	Strong conflict with CBA1. Some remnants of Critically Endangered Cape Flats Sand Fynbos – CBA1. Required towards national biodiversity targets. Development here should be restricted to the degraded habitat and would require a biodiversity offset, needs to allow for creation of networks and connectivity and incorporate mechanisms that allow the financing and management of adjacent biodiversity areas. Vegetation needs fire management (controlled burning), which needs to be considered in any development design.
Erf 732 Kraaifontein; new urban infill	No; EIA in progress	Non-defined	CBA2, CESA	Assess long-term viability; biodiversity offset as minimum requirement or set aside sensitive areas for conservation
Stellenbosch Farm 222, portions 30 and 62; Haasendal Housing development	No	Agriculture Proposed for medium density residential development, inside urban edge	CBA1, CBA2 100% Irreplaceable, medium and low condition areas; CBA 1, 2	Higher quality areas set aside for biodiversity conservation as an on-site offset.
CA209-0-1, 210-2, 212-8, Annandale Mixed use development	November 2008	Agriculture	Low condition, irreplaceable vegetation; CBA2 wetland; no remnants on 212-8 or 209-0-1	No

District E

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Erf 5113, Gordon's Bay, Grassoville	No	Agriculture; inside urban edge, earmarked for medium density residential	Mainly CBA2, small patches of CBA1	Assess long-term viability of securing & consolidating irreplaceable, good condition habitat; biodiversity offset for residual impacts
Erven 14335, 11112, 15151 Strand (part of Weltevreden Core Flora Site); Morkels Cottage	November 2013	Agriculture (14335, 15151) and education (11112)	100% irreplaceable CBA1; Core Flora Site; medium & restorable condition Lourensford Alluvium Fynbos (11112: No Natural Habitat)	6ha portion of medium-quality habitat set aside for conservation; however an amendment may remove some of this for a school access road.
Portions 13 and 14 of Stellenbosch Farm 653 (Vergenoegd), Eersteriver	June 2006	Zoning is Special zone in terms of Section 8 scheme regulations, residential, open space/ conservation area (approved by PGWC)	100% Irreplaceable, good condition vegetation and wetlands; CBA 1, other natural vegetation	Film studio approved: remaining on-site conservation area requires ongoing management & monitoring
Erven 2633, 3968,	No; EIA in	Agriculture	Unselected	Loss of this habitat reduces future conservation

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Macassar; City housing project	progress		Endangered vegetation in low condition, no natural habitat, other natural vegetation	options; biodiversity offset for residual impacts
ST781-11, ST794-37, ST784-38 NDA: mixed	No	Agriculture	No longer a conflict	Required for wetland targets; large wetland alluvial fan; should be conserved unless long-term viability poor
Farms 830, 832, 862, 1052, 1100, 1369 Sir Lowry's Pass; Casa Maris	February 2013; in appeal	Agriculture	Mainly CBA 1	Required for vegetation and species targets; development opposed in its current form; a more compact development on transformed areas close to the village would be acceptable
Farm 794/35,38,43; Heartland	No; EIA in progress	Agriculture	CBA wetland	Wetlands and wetland buffer to be set aside for conservation

District F

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Erven 18332, 18370 Khayelitsha housing project	August 2014	Limited use	OESA, wetlands	EMP and management of wetlands & wetland buffer
Erf 644 Mitchells Plain; Housing	No	Non-defined	Medium & low condition, Endangered vegetation; CBA1, unselected	EIA required; biodiversity offset for any land lost to development; minimum biodiversity corridors must be retained
Erf 52676 Khayelitsha (Swartklip Denel site)	No	Agriculture	CBA1 terrestrial & wetland areas	EIA required; biodiversity offset for any sensitive land lost to development; minimum biodiversity corridors must be retained & integrity of majority of the site secured
Erven 56694, 56696 Khayelitsha; Vuyani Market	No; EIA in progress	Agriculture	CBA1 and CBA2 wetlands	Assess long-term viability; biodiversity offset as minimum requirement or set aside sensitive areas for conservation
Erf 1898, Blue Downs; residential development	No	Limited use	Unselected remnant; low condition Endangered vegetation, other natural vegetation	Loss of this habitat reduces future conservation options; biodiversity offset for residual impacts
Erf 1892, Blue Downs; Phase 2 of N2 Gateway Housing Project: 'Nuwe Begin'.	July 2009	Limited use	Unselected natural vegetation	Remnant removed from BioNet
Erf 1897, Blue Downs (Conifers)	November 2012	Agriculture	Minimum set, medium condition Endangered vegetation & wetlands; CBA 1	Biodiversity offset a condition of approval.
Remainder erf 1, Mfuleni, also erf 987, 989-1287 Mfulen Ext 2 residential	August 2014	Limited use & Transport 2	Erf 1: Minimum target and connectivity site; good condition, endangered	Considered "no-go" in terms of development.; only alternative would be to secure a significant biodiversity offset

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
development			vegetation (CBA1)	
ST 854-2 Mfuleni; Bossasa Housing project	May 2013	Agriculture	CBA 1; good condition, endangered strandveld vegetation & wetlands	Biodiversity offset required as condition of approval
Stellenbosch farm 981, portion 18 Metro SE Cemetery	2006	Agriculture	CBA1 terrestrial & wetlands	Portion not required in cemetery (dune slack wetlands) managed for biodiversity; biodiversity offset for section lost
Cape farm 544 Driftsands NR; formalizing of Los Angelos and Greenpark informal settlements	Nov 2011	Provincial Nature reserve,	Proclaimed nature reserve	Biodiversity offset of 206ha required: negotiated in collaboration with CapeNature
Stellenbosch Farms 644, portions 0 and 1, as well as 643	No	General Industrial	CBA2 100% Irreplaceable, restorable condition sites; No Natural Habitat	Although 100% irreplaceable, long-term viability is poor; biodiversity offset for residual impacts
Stellenbosch Farm 468, portions 15-20 (portion 17 partly developed for Welmoed cemetery)	Not required: approved by old RSC, Stellenbosch, when EA not needed	Agricultural & Open Space 3	CBA1, CBA2, terrestrial & wetland habitat	Medium condition & consolidation areas considered "no-go" and incorporated into the Penhill Conservation Area (Biodiversity Agreement) managed by City Parks
ST453-0-2 NDA: high density	No	Limited use	no natural habitat,	Required for wetland targets; long-term viability may be low; biodiversity offsets for residual impacts
ST451-6 NDA: high density	No	Agriculture	CBA 2 wetland; no natural vegetation	Required for wetland targets; long-term viability may be low; biodiversity offsets for residual impacts

District G:

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Erven 00-90477 & 00-90479; Youngsfield NDA	No	Open Space 2	Medium and low condition, irreplaceable vegetation; CBA1	Some remnants of Critically Endangered Cape Flats Sand Fynbos – CBA1. Required towards national biodiversity targets. Most critical biodiversity areas envisaged as open space, but management thereof is critical. EA studies needed.
Erven 21202, 1213, 648, 650, 21199, 21200 Strandfontein; NDA	No	Agriculture	Medium and low condition, Endangered vegetation; CBA1 & wetlands	Some of these areas should become conservation areas, which need to be identified and declared, together with suitable corridors.
Erf 1212	No	Non-defined	Good condition, Endangered vegetation; CBA1	Area is essential for ensuring the conservation of the False Bay biodiversity corridor

Erf 829; Phase 2 of Pelikan Park NDA;	No	Non-defined	Mostly transformed, small portion part of conservation site (Protected: In Perpetuity)	Studies are underway to clarify boundaries of conservation area along dunes. Considered high conservation priority to consolidate the False Bay Ecology Park
Erf 1 Capricorn	No	Non-defined	Good condition, Endangered vegetation and wetlands, CBA1, Core Flora Site	Connectivity to Rondevlei and the False Bay coastal corridor is critical to maintain, in addition to the high dunes, Endangered vegetation and wetlands, partly in coastal zone. Loss of vegetation should be subject to a biodiversity offset.
Ottery; erven 2924, 2925, 2926, 2712, 2987; NDAs	No	Non-defined	Low condition, irreplaceable vegetation and wetlands, CBA2	Conflicts should be addressed in EIA. Extensive wetlands may pose a challenge to development. Biodiversity offset for any irreplaceable remnant developed where there is residual impact.
Erven 579-582, 587-591, 637-641, 648, 650, 654, 657, 658 Oaklands development	No, EIA in process	Agriculture	CBA1, CBA2, wetlands	Assess long-term viability; biodiversity offset as minimum requirement or set aside sensitive areas for conservation
CA609-7,11,12,16,74,86 New General Industrial	No; except CA609-16 EA June 2012; CA609-74, 86 in process	Agriculture	CBA2, OESA, wetlands	Wetlands important for habitat; any loss of habitat requires mitigation

District H:

Erven	EA/ date issued	Planning status (zoning)	BioNet class	Comment / biodiversity imperative
Erven 1217 & 1218), Jupiter Avenue site, Ocean View	No	Community 1: local & POS	Unselected natural vegetation	Portion outside edge not considered for development. It is unselected natural vegetation and would be subject to a biodiversity offset if developed.
Erven 969-0, 970 & others, Dido Valley NDA located in natural vegetation	No, in process	Non-defined	Unselected Endangered vegetation in low to good condition	NDA largely determined by pending City/PGWC application. Even though area is not classified as irreplaceable, any development should be subject to a biodiversity offset in mitigation of residual impacts. Vegetation needs fire management (controlled burning), which needs to be considered in any development design. Details to be resolved through formal application process. North-western-most area of Dido Valley is dominated by a stream through it which effectively forms a containment of development in the valley & will not be identified as part of the NDA.
Erven 33-1630, 22-9167 Constantia Nek; NDA	No	Agriculture	Farmland; OESA	Need to maintain an open-space faunal corridor – migration function of ESA – within any development
Erf 948-32 Protea Ridge; NDA	No	Limited use	CBA1; Core Flora Site	Very important biodiversity corridor linking north and south of Peninsula Mountain Chain and Table Mountain National Park. Also recognized as a Core Flora Site. Part of corridor identified

				and secured, but recognition that this should be maximised in future outcome for this area. Remaining undeveloped area to the east of what the BioNet indicates as CBA1 or connectivity area, to be part of a reduced NDA (indication as NDA in plan dependent size). Any development in this area needs to unlock resources to manage remaining biodiversity areas. POS areas associated with the stream running along SW of corridor should be retained.
Erf 953-13 Capri, Housing development	No, in process	General Residential 2	Unselected natural vegetation and wetland	Mitigation required for residual loss to biodiversity.

Other general comments on the SDPs

District B

1) Area between the Diep River, BNR and Morning Star. Biodiversity corridors indicated on the SDP are too narrow to function optimally. The Critically Endangered Cape Flats Sand Fynbos (CFSF), endemic to Cape Town, is susceptible to edge effects and must be managed with summer fires to conserve biodiversity. Corridor widths of 300m are recommended (Fynbos Forum Ecosystem Guidelines 2005). Narrower corridors become increasingly expensive to manage. E.g. a corridor width of 100m (as depicted as the east-west corridor from BNR) would be impacted by at least 25m of edge effects at each side leaving only 50m width of core corridor area. In addition, such a narrow corridor needs to be anchored in larger remnants to avoid long-term biodiversity loss. The high and medium condition biodiversity land in this area, that has been excluded from the corridor, is 100% irreplaceable and is needed to conserve this veld type. We have a national target of 30%, calculated to secure 70% of the biodiversity, but only 14% remaining, half of which is in low condition. Securing this land will go part way towards the 10% IUCN (CBD 1992) target, but will still only attain <7% conserved. It is also important to conserve one reasonably large reserve of each of South Africa's major ecosystems, and this is the only place remaining where this can be reasonably done for CFSF.

2) Proposed landfill site south of Atlantis. Impact on Witzand Aquifer (drains into the south end of a productive aquifer).

District F

- 1) Indicates land as "natural" when it is mainly transformed (most of CA544-5 is landfill site). However, it is indicated as an OESA as it is open land for faunal connectivity between Swartklip Denel & the coast.
- 2) Plan P2 shows a large part of the northern half of the Swartklip Core Flora Site for 'other structuring open space'. However, this is priority conservation land, so hopefully this does not mean a non-compatible land-use to biodiversity conservation.

District H

- 1) Not on SDP, but the planned M4-M5 Link road will impact on CBA1 vegetation abutting the Zandvlei Estuary Nature Reserve.

The Role of Environmental Impact Assessments in assisting the decision making process with regard to areas of potential impact

Developments involving removal of or damage to key natural resources (CBAs, other natural vegetation, fauna, wetlands etc.) are likely to require the initiation of an environmental assessment process in terms of the requirements of the NEMA EIA regulations. The environmental assessment (EA) processes should result in an evaluation of the magnitude and significance of the impacts of a project and provide clear recommendations on how to prevent or mitigate them.

However, the scope of EAs tends to be project and site specific and often most emphasis is placed on dealing with the impacts of construction. EAs are also often undertaken when significant resources have already been invested in the project (e.g. on design, or site purchase) and there is pressure for the development to take place. There is thus limited scope for creative and effective impact prevention or mitigation options – particularly when there are conflicts between development and the natural environment. A key aspect is therefore to ensure that *the Terms of Reference (or scope) of the EA allows the Environmental Assessment team to fully explore realistic options for impact prevention and/or mitigation – whether this be on site or elsewhere in the form of offsets*. In all cases, this must be done in consultation with the District Environmental & Heritage Management and Biodiversity Management Branches.

Principles for assessing development proposals in “areas of potential impact” on selected natural environmental attributes (flora, fauna, wetlands, rivers, coast etc.)

- Areas of potential impact should be addressed as soon as possible** in the planning process and before significant resources have been allocated to a project. This requires a cooperative and transparent approach to these areas. Consultation with key role players should be initiated and include the City's Environment & Heritage Management Branch, Biodiversity Management Branch, Spatial Planning, Catchment Stormwater and River Management Branch, and other key stakeholders such as Cape Nature.
- Proactively and timeously search for the best practicable alternative:** The application of this principle is dependent on the significance of the potential impact when viewed in the context of the broader strategic intent of the district plan. In many instances, trade-offs are required and the SDP has sought to inform where these might be appropriate. However, development in highly sensitive or significant natural environments is generally undesirable, and has, where possible, been avoided in the district plan. In the limited instances where this has not occurred, balance has been sought by, for instance, the planning of biodiversity corridors where highly sensitive natural environments are likely to be impacted. More

detailed planning of these areas should consider alternatives and detailed design intervention to prevent or minimise potential impact (as per 3 and 4 below). The Biodiversity Management Branch in the Environmental Resource Management Department and/or the Catchment Stormwater and River Management Branch of the Roads and Stormwater Department, where relevant, should be consulted to provide advice.

If an environmentally sensitive area has to be used, investigate means to:

- ✓ Maximise retention of intact natural habitat and ecosystem connectivity
- ✓ Avoid fragmentation of natural habitat and aim to maintain spatial components of ecological processes (e.g. ecological corridors and ecosystem interfaces)
- ✓ Minimise unavoidable impacts by reducing the project footprint and determining the least damaging layouts of the proposed development and its accompanying infrastructure (e.g. by concentrating disturbance in degraded areas)
- ✓ Remedy habitat degradation and fragmentation through rehabilitation.³

In key areas (particularly where on-site mitigation is limited or not possible) investigate the use of biodiversity offsets⁴ as a mitigation measure. This may involve making resources available to secure and manage an alternative piece of land of the same ecosystem type or conservation of a proportion of the property *in situ*. The Biodiversity Management Branch may provide advice in this regard, but DEA&DP are the decision-making authority.

Areas of potential impact may be identified in the district plan which already have environmental authorisation in terms of applicable legislation. The identification of these areas is not intended to form grounds for review of such approvals.

Although most areas of potential impact on natural resources occur due to the presence of critical biodiversity areas and listed ecosystems which require conservation measures in terms of national legislation, consideration also has to be given to the potential loss or sterilisation of natural resources which currently – or in future – will have value as economic resources (e.g. strategic mineral resources or aquifer water to supplement the City's supply), or which provide an ecosystem service (e.g. water filtration and flood attenuation).

The principle to apply is that where there are potential impacts of development/land use proposals on key resources – efficiency, equity and sustainability criteria must be used to determine the best use for the greater good of the City's people and the environment. The assessment of impacts in terms of these criteria should include assessment of cumulative impacts at local, regional and national scales.

³ More information on the above may be obtained from the Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape – from which the above points were extracted. Other useful sources of information include the principles included in the National Environmental Management Act and the National Environmental Management: Biodiversity Act, the Provincial Spatial Development Framework (promoting densification), the Coastal Edge Policy, the Catchment Management policies on river buffers and developments in flood prone areas and the Department of Environmental Affairs and Development Planning's (DEADP) offset guideline. The DEADP guideline for involving biodiversity specialists in EA processes also provides useful information.

⁴ DEA&DP (2011) Information Document on Biodiversity Offsets, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs and Development Planning (DEA&DP), October 2011

Appendices

(See separate document)